



Greening Headquarters Update

JANUARY 9, 2012

Greening Updates:

Office of Operations

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Waste Minimization & Recycling Updates



Our Waste Minimization & Recycling program was a success in FY 2011. Thanks to the efforts of USDA employees and Operations Staff, our recycling rate has exceeded 50%. The recycling rate does not include waste reduction activities like the reuse of computers or the increase in double-sided

paper use or elimination of unwanted mail or the use of high performance hand dryers in restrooms. When you include our "reduce" and "reuse" actions, our waste diversion rate is over 70%. The President has mandated that the federal facilities divert 50% of their waste by FY 2015. ***The Headquarters Complex, therefore, is already exceeding the President's goals and is now a showcase facility for waste management.*** The Headquarters Complex recycling program generated over \$40,000 in revenue FY 2011. Since FY 2005, the reduction of waste leaving the complex was 700 tons, saving over \$35,000 in waste disposal fees. In FY 2012, we will work to reduce our waste management costs further by diverting more waste.

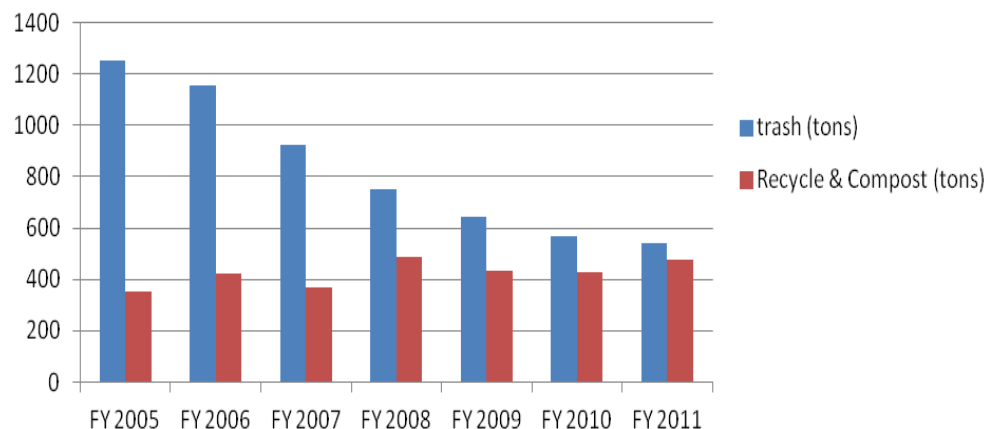


As part of our efforts to improve the appearance of our hallways, we have begun replacing the old outdated hallway trash and recycle stations with new stations that include collection containers for compostable wastes. Not only will these new stations enhance our Waste Minimization & Recycling Program, they will help to de-clutter our hallways. Employees can help to reduce the environmental impact of our waste by learning (and sharing what you learn with your co-workers) what is compostable in the cafeterias and placing the compostable waste in the specially designated containers for compostable waste.



**Remember to
recycle!**

Trash & Recycle Trends FY 2005 to FY 2011



Sustainable Buildings

On December 1 the Office of Operations received notification, that the recently completed Wing 5 renovation received a Leadership in Energy and Environmental Design (LEED) Gold rating in Commercial Interiors (CI) version 2.0 from the Green Buildings Certification Institute (GBCI). The project received 33 points, exceeding the minimum Gold score requirement. Attaining LEED certification complies with the intent of Executive Order 13423 and the Guiding Principles for Federal Leadership in High Performance and Sustainable Building. The newly renovated space provides a safer, healthier, accessible, energy efficient work environment, thereby enhancing productivity.





**Do not forget
to bring your
bag!**

Reusable bags

A simple way to reduce waste and litter is to use reusable bags when you go shopping. In the District, disposal bag use has dropped sharply with the introduction of a 5-cent bag fee. Between January 2010 (when the D.C. bag fee went into effect) and January 2011, the District collected \$2 million in revenue from the fee, and disposable bag use dropped from 270 million bags in 2009 to 55 million bags in 2010. Starting January 1, 2012, there will be a similar bag fee in Montgomery County. These bag fees are a key element of reducing litter and cleaning up local streams and the Potomac and Anacostia Rivers.



Bring Your Bag!
Fight Litter

Energy Updates

During the first quarter of FY 2012, the Headquarters complex electrical use continues to decrease. The Office of Operations is working on several projects to reduce our electrical costs and usage even further. For example the Office of Operations is replacing old inefficient lighting with new efficient lighting. The lighting retrofits are occurring in the South Building offices along C Street between Wings 3 and 5 and in several offices in the Jamie L. Whitten Building.

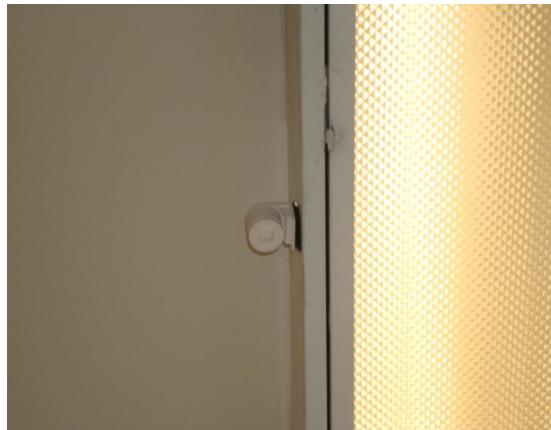
Stairwells lighting

Although many of the changes in the facility are subtle, significant savings are expected. One recent eco-upgrade was the installation of daylight harvesters on many of our stairwell lights. When it is sunny outside, the large stairwell windows bring in a lot of natural light, enough light that we can automatically dim the light fixtures, thus saving energy. This is possible with the installation of a small photo-sensor.

Retro-fitted stairwell lights near windows.



Note some round device on the side of the light fixture that measures the amount of light in the stair well.



**Light emitting
diodes are
coming soon!**

“Greening” your home should include reviewing your lighting options. If you have been to your local hardware or lighting supply store over the past few years, you will have noticed big changes in the light bulbs section. These changes are due in part to the Energy Independence and Security Act (EISA) of 2007. EISA requires many general-purpose incandescent light bulbs be 30% more energy efficient by 2012 to 2014. Starting January 2011, 100- watt incandescent light bulbs are phasing out unless manufacturers improve the bulb’s efficiency by the 30% EISA mandate. With improved technologies and the looming phase-out of incandescent light bulbs, there have been rapid developments in energy efficient light bulbs, particularly with bulbs using light emitting diode (LED) technology. Not only do LED bulbs use less electricity than both incandescent and compact fluorescent lights, they have a rated life of over 50,000 hours (more the 50 times longer than incandescent bulbs!).

Unlike incandescent bulbs, the new energy efficient bulbs are designed to provide a wide range of colors (cool, warm, and

daylight). With choice, however, consumers will need to understand the Kelvin color scale, or they may be dissatisfied with the new light bulbs. The lower Kelvin "warm" lights (2700 to 3000 K) provide a full glow similar to incandescent light bulbs. These bulbs are good for living rooms and bedrooms and are more flattering for skin tones and clothing. Higher Kelvin "cool" lights (3500 to 4100 K) provide a clean glow that is good for areas with visual tasks such as kitchens and offices because these bulbs provide good light contrast. Light bulbs that are above 5000 K provide daylight conditions that are good for reading. Visit: http://www.energystar.gov/index.cfm?c=cfls.pr_cfls_color for more information.

GSA's Heating & Chilled Water Plant

Across the street from the South Building at 12th and C Street is an unassuming building. This building is the GSA Heating & Cooling Plant. While unassuming on the outside, it is anything but that on the inside. The building houses a high efficiency combined heat

and power (CHP) plant. The CHP plant uses boilers to generate steam to heat eighty-two buildings in D.C., including the steam to heat for our headquarters buildings. The steam is delivered by a seven-mile network of underground



tunnels and five miles of buried pipes that crisscross the city. Boilers also generate steam that generates 10 MW of electricity. The electricity runs chillers that provide cooling to the USDA Headquarters Complex, the Forrester Building and several Smithsonian museums. The waste heat from the generation of electricity generates steam for heating. By utilizing the waste heat from the power generation, efficiencies are greatly improved. GSA is reporting that their CHP project has resulted in a 20% reduction of greenhouse gas emissions. GSA recently earned the award of Regional Energy Project of the Year from the Association of Energy Engineers.



**Heating &
Chilled Water
Plants**

Holiday Decoration Contest

There were many beautifully decorated holiday displays during December. Operations staff checked out the displays for appearance and used minimal amounts of electricity. The winner of the 2011 Holiday Season Display is Public Affairs Division of The Natural Resources Conservation Service

Some of the NRCS PAD holiday displays (sixth floor South Building)



Green Purchasing Updates

Last month I participated in a Biopreferred Program webinar. During the webinar, I gave a presentation on our use of bio-based products at the Headquarters Complex. If you are interested in learning about this USDA initiative and what we are doing at HQ to support it, you can view the webinar by going to the Biopreferred seminar archives. Click here to go to the archives and click the Dec. 6 archive.

http://www.energyworkshops.org/BioPreferred_Awareness_to_Action/index.html



**USDA's
BioPreferred
Program Label**

I am always looking for suggestions for the newsletter. If you are "greening" your office or operations at Headquarters, email me at ed.murtagh@dm.usda.gov

